ABSTRACT OF THE DISCLOSURE

A method for treating patients with movement disorders includes unilaterally or bilaterally stimulating one or both of the left and right branches of a patient's vagus nerve directly or indirectly with an electrical pulse signal generated by an implantable neurostimulator with at least one operatively coupled nerve electrode to apply the pulse signal to the selected nerve branch at a location in the vicinity of the patient's diaphragm, either slightly above or slightly below the diaphragm. A device for performing the method includes a government approved implantable neurostimulator which is programmable to enable physician programming of electrical and timing parameters of the pulse signal, to generate the desired therapy regimen for alleviating the disorder by application of the therapeutic electrical stimulation signal to a selected nerve. Automatic detection or patient sensing of a symptom of the disorder may be utilized for activating the device.